

### Impairment Summary

Assessment Unit	Stream Name	Length (miles)	Boundaries	Cause
VAW-L05R_CRV01A00	Carvin Creek	1.79	Carvin Creek mainstem from its confluence with Tinker Creek up-stream to the mouth of Deer Branch.	Escherichia coli
VAW-L05R_CRV02A00	Carvin Creek	3.59	Carvin Creek mainstem from the mouth of Deer Branch upstream to an unnamed tributary upstream of I -81.	Escherichia coli

### Land Use Distribution (NLCD 2006)

Land Use Category	Area	
	Acres	Percent
Developed	4228.4	23.3
Agriculture	541.0	3.0
Forest	12,641.3	69.6
Water/Wetlands	717.4	3.9
Other	45.5	0.3
<b>Total</b>	<b>18,173.7</b>	<b>100.0</b>

### Existing and Allocated Bacteria Loads

Land Use/Source	Total Annual <i>E. coli</i> Loads (billion coliform forming units/year)		Percent Reduction (%)
	Existing Load	Allocation Load	
<b>Land Based Non-point</b>			
Developed	111,009	11,101	90.0%
Agriculture	125,257	12,526	90.0%
Forest	2,406,541	360,981	85.0%
Water/Wetlands	2,771	416	85.0%
Other	7,675	767	90.0%
<b>Direct Non-point</b>			
Livestock Direct	162	0	100.0%
Wildlife Direct	94,514	28,354	70.0%
Failed Septic, Straight Pipes and Sewer Overflows	65,552	0	100.0%
<b>Point Source</b>	0	0	0.0%
<b>MS4s</b>	1,65,881	116,588	90.0%
<b>Total</b>	<b>3,979,362</b>	<b>530,733</b>	<b>86.7%</b>

### Existing Best Management Practices Agricultural and Stormwater

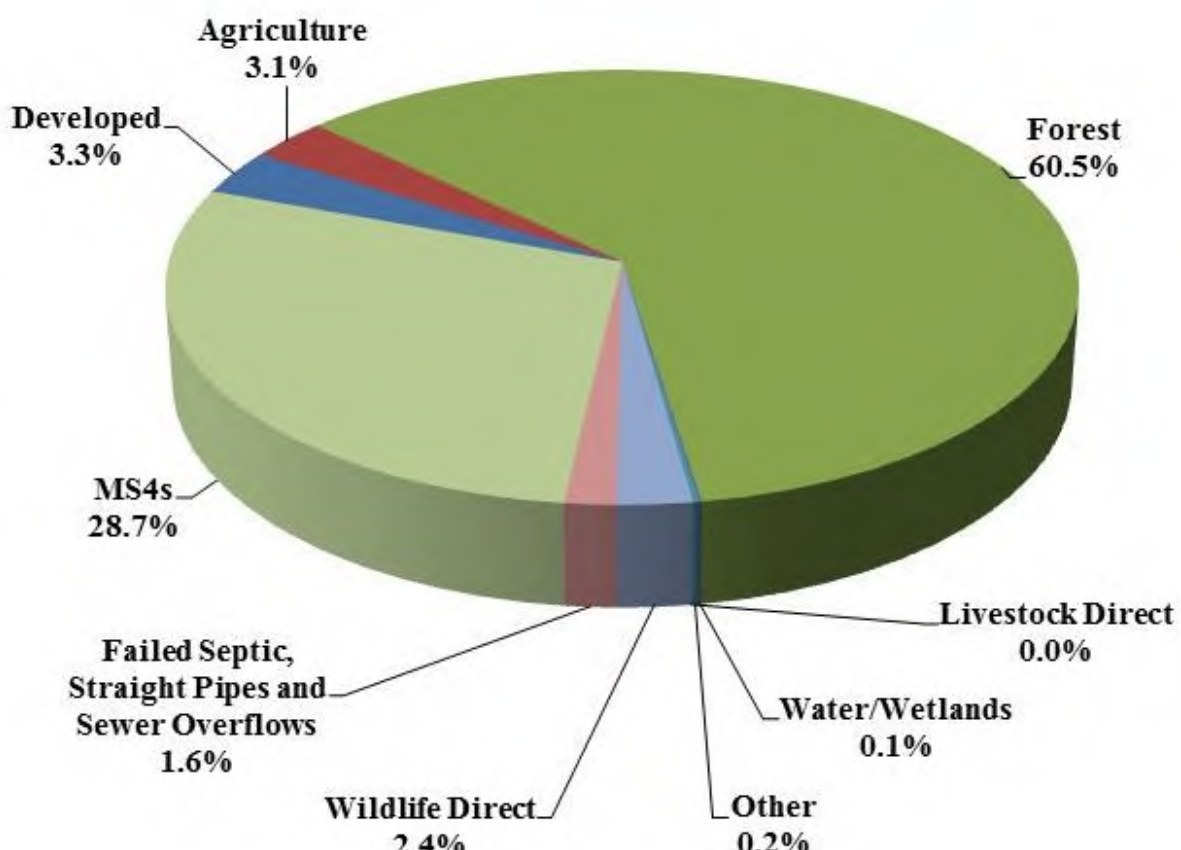
Agricultural Best Management Practice	Count	Area Treated	Streamlength Protected (ft)
No Known Agricultural Best Management Practices			

Stormwater Best Management Practice	Count	Reported Area Treated* (acres)
Detention Basin	66	447.1262
Extended Detention Basin	7	33.13817
Infiltration	5	No Data
Manufactured Unit	21	1.868404
Sediment Forebay	1	No Data
Underground Detention Basin	14	No Data
Wet Pond	2	No Data

\*Not all Best Management Practices reported area treated

The municipalities are in the process of creating Best Management Practices inventories, so not all Best Management Practices present in the watershed may be reported.

### Existing Bacteria Load Distribution



### Potential Implementation Actions to Reduce Bacteria

- Existing Best Management Practice Retrofits
- Low Impact Development Stormwater Controls
- Riparian Buffer Creation/Expansion
- Septic System Repair/Replacement
- Pet Waste Disposal and Education Programs